

## 510(k) Summary

**Submitter's Name/Address**

Abbott Laboratories  
1920 Hurd Drive  
Irving, Texas 75038

**Contact Person**

Linda Morris  
Senior Regulatory Specialist MS 1-8  
Regulatory Affairs  
(972) 518-6711  
Fax (972) 753-3367

**Date of Preparation of this Summary:**

September 23, 1998

**Device Trade or Proprietary Name:**

C4

**Device Common/Usual Name or Classification Name:**

Complement 4

**Classification Number/Class:**

Class II

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

The assigned 510(k) number is: K983356.

**Test Description:**

C4 is an *in vitro* diagnostic assay for the quantitative determination of C4 in human serum or plasma. Antigen in the sample bonds to the specific antibody in the reagent, forming an immune complex. The immune complex causes an increase in light scattering, measured by reading turbidity at 604 nm, which correlates with the concentration of C4 in the sample.

**Substantial Equivalence:**

The C4 assay is substantially equivalent to the K-ASSAY C4 assay (K964297/S3) on the Hitachi® 717 Analyzer.

Both assays yield similar Performance Characteristics.

**Similarities:**

- Both assays are *in vitro* immunoassay methods.
- Both assays can be used for the quantitative determination of C4.
- Both assays yield similar clinical results.
- Both assays are based on the light scattering properties of antigen-antibody complexes.

**Differences:**

- There is a difference between the assay range.

**Intended Use:**

The C4 assay is used for the quantitation of C4 in human serum or plasma.

**Performance Characteristics:**

Comparative performance studies were conducted using the AEROSET™ System. The C4 assay method comparison yielded acceptable correlation with the K-ASSAY C4 assay on the Hitachi 717 Analyzer. The correlation coefficient = 0.9956, slope = 1.003, and Y-intercept = 0.018 mg/dL. Precision studies were conducted using the C4 assay. Within-run, between-run, and between-day studies were performed using two levels of control material. The total %CV for Level 1/Panel 401 is 1.6% and Level 2/Panel 402 is 2.5%. The C4 assay range is up to 82.23 mg/dL. The limit of quantitation (sensitivity) for the C4 assay is 0.471 mg/dL. These data demonstrate that the performance of the C4 assay is substantially equivalent to the performance of the K-ASSAY C4 assay on the Hitachi 717 Analyzer.

**Conclusion:**

The C4 assay is substantially equivalent to the K-ASSAY C4 assay on the Hitachi 717 Analyzer as demonstrated by results obtained in the studies.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

NOV 4 1998

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

Ms. Linda Morris  
Senior Regulatory Specialist MS 1-8  
Regulatory Affairs  
Abbott Laboratories  
1920 Hurd Drive  
Irving, Texas 75038

Re: K983356  
Trade Name: C4  
Regulatory Class: II  
Product Code: DBI  
Dated: September 23, 1998  
Received: September 24, 1998

Dear Ms. Morris:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

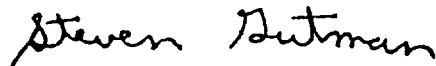
If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

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This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597, or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,

A handwritten signature in dark ink, reading "Steven Gutman". The signature is written in a cursive style with a large, stylized 'S' and 'G'.

Steven I. Gutman, M.D., M.B.A.  
Director  
Division of Clinical  
Laboratory Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

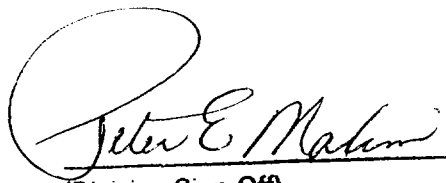
Enclosure

510(k) Number (if known): K 983356

Device Name: C4

Indications For Use:

The C4 assay is used for the quantitation of C4 in human serum or plasma.  
Complement is a group of serum proteins which destroy infectious agents.  
Measurement of these proteins aids in the diagnosis of immunologic disorders,  
especially those associated with deficiencies of complement components.

  
(Division Sign-Off)  
Division of Clinical Laboratory Devices  
510(k) Number K 983356

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE  
IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)  
Prescription Use ☒ OR Over-The-Counter Use ☐  
(Per 21 CFR 801.109)

(Optional Format 1-2-96)

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